

Appl. No. 09/497,774  
 Amdt. dated 11/10/2005  
 Reply to the Office Action of 08/10/2005

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended): A system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data flow for reception by said a plurality of users;

said server for transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

said server for defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, for arranging said a plurality of users into each of a respective group within the plurality of groups in at least one group of recipients of a respective data stream of at least one data stream, with each user being arranged in a respective group of the at least one group, and wherein each respective group for receiving said user requested data in said respective data stream corresponding to a point of transmission of said data flow; and

said server, responsive to the arrangement of said users in said plurality of groups at least one group, for transmitting said user requested data in said respective stream the plurality of data transmissions to each user according to each user's assigned said respective group so that each of the plurality of users assigned to a particular group receives data from the same location within the user requested data;

and wherein the server is further for realigning a respective first user within the plurality of users from a first respective group within the plurality of groups, the first group corresponding to users receiving user requested data at a first location in the user requested data respective data stream, to a second respective group, the second group corresponding to users receiving user

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requested data at a second location in ~~the user requested data, so as to~~ cause the first user to receive the same data as a second user previously assigned to the second group; ~~stream,~~

the second location being selected by the server, independent of said user requests for data, to change the location in the user requested data ~~stream~~ from which the respective user is receiving ~~the user requested data~~ to any location in the user requested data stream other than the first location in the user requested data stream.

2. (currently amended): The system of Claim 1, wherein, said server realigns ~~a respective the first user with said respective data stream to change the relative position of said respective user to the data being transmitted in said respective data stream,~~ responsive to a signal from said respective user.

3. (original): The system of Claim 1, wherein, said server arranges said users into said groups arranged by the size of said group.

4. (currently amended): The system of Claim 1, wherein, said server arranges said users into said groups based upon ~~arranged by~~ a time interval in which said users requests were received ~~for assembling said group~~.

5. (currently amended): The system of Claim 1, wherein, said server is limited to a maximum number of said groups and arranges said groups ~~in relation to~~ maintain said maximum number.

6. (original): The system of Claim 1, wherein, said telecommunication medium is the Internet.

7. (original): The system of Claim 1, wherein, said user's requests are received from a world wide web browser.

8. (currently amended): The system of Claim 1, wherein,  
said data is transmitted with identifiable locations in said data flow stream;

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said server identifying a respective identifiable location in said data stream corresponding to said request; and

said server, ~~moving~~ realigning said ~~respective first~~ user to ~~another of said second group,~~ said second group groups receiving said data flow stream from ~~another a specified~~ location in said data flow stream related to said respective identifiable location.

9. (currently amended): The system of Claim 8 wherein, said ~~related first~~ location is advanced in time of transmission of said data ~~stream~~ flow relative to said respective identifiable location.

10. (currently amended): The system of Claim 8, wherein, said ~~related first~~ location is delayed in time of transmission of said data flow stream, relative to said respective identifiable location.

11. (currently amended): The system of Claim 8, wherein,  
said server has a data communications interface for the transmitting of the plurality of data transmissions, wherein the data communications interface comprises a plurality of ports and with each of said plurality of groups group to associated with a respective port, wherein each respective port transmits the respective data transmission corresponding to its connected group wherein each user assigned to a respective group is connected to the respective port for that respective group for receiving said data stream from separate respective locations in said data stream through a respective port; and

said server, ~~moving~~ realigning said first user to ~~a said second group separate respective location in said data stream~~ by reconnecting said first user to another of said respective ports.

12. (currently amended): The system of Claim 48, wherein,  
said server has a data communications interface for the transmitting of the plurality of data transmissions, wherein the data communications interface comprises a plurality of respective ports;  
said server associating each of said plurality of groups with a respective port;

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said server is connected to users and assigned to said groups through separate the  
respective ports assigned to that group, wherein each respective port transmits the respective data  
transmission corresponding to its connected group wherein each user assigned to a respective  
group is connected to the respective port for that respective group; and

said server realigning a respective user from said first respective group to said second  
respective group with said data stream to change the time in the transmission of said data stream  
said user is receiving ~~said transmission~~, by reconnecting said respective user to another of said  
respective ports.

13. (currently amended): The system of Claim 12, wherein,

said respective ports have a plurality of respective sockets and each of said users are is  
connected to respective sockets according to the respective group to which the respective user is  
assigned;

said server has a plurality of pointers, each pointer associated with a respective socket,  
pointing into separate respective locations in said data store ~~associated with respective sockets,~~  
~~for sending the server transmitting data retrieved~~ from said separate respective locations in said  
data store to said ~~respective sockets and to~~ said respective users with through said respective  
sockets; and

said server realigning ~~a the~~ respective user from the first group to the second group with  
~~said data stream~~ to change the a time in the transmission in said data ~~stream~~ flow said user is  
receiving ~~said data~~, by reconnecting said respective user to another respective socket ~~connected~~  
to associated with another respective pointer.

14. (currently amended): The system of Claim 12, wherein

each of said ports have a plurality of respective sockets and said respective users are each  
connected to a respective socket ~~sockets;~~

said server has a plurality of pointers, each pointer associated with a respective socket,  
pointing into separate respective locations in said data store ~~connected with respective sockets,~~  
~~for sending the server transmitting data retrieved~~ from said separate respective locations in said  
data store to said ~~respective sockets and~~ said respective users ~~connected to~~ through said  
respective sockets; and

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said server realigning the a respective user from the first group to the second group with  
~~said data stream~~ to change the a time in the transmission in said data stream, flow said user is  
receiving ~~said data~~, by moving said pointer for a respective socket to another location in said  
data store.

15-16. (canceled):

17. (currently amended): The system of Claim 1, further comprising:

means for signaling connected to said users first user for sending discrete respective  
signals to said server;

said server, responsive to said discrete respective signals, realigning a respective the first  
user from the first group to the second group, wherein one of the discrete respective signals  
specifies the second location with said data stream to change the relative position of said  
respective user to the data being transmitted in said data stream; and

wherein, ~~said realignment is~~ the first location and the second location are in discrete time  
steps relative to the point of transmissions for each of the plurality of data transmissions position  
of said respective user to the data being transmitted in said data stream.

18. (currently amended): The system of Claim 17, wherein, said discrete respective signals  
include signals for advancing or retarding a point of transmission for the respective data  
transmission assigned to the second group said realignment of said respective position of said  
respective user.

19. (original): The system of Claim 17, wherein, said discrete respective signals include  
signals for realignment in discrete intervals.

20. (canceled):

21. (original): The system of Claim 19, wherein said discrete intervals are intervals of space  
displacement in the location of said data in said data stream.

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22. (currently amended): ~~The~~ The system of Claim 48, wherein,  
said server includes means for disconnecting a respective user with said respective data ~~flow stream~~ at an identifiable location in said ~~respective user requested data stream~~ and for reconnecting said user to another data flow stream of said ~~at least one data stream~~.
23. (original): The system of Claim 22, wherein,  
said server includes means for disconnecting said respective user with said another data ~~stream flow~~ after a discrete interval and reconnecting said user with said data ~~stream~~ flow at said identifiable location.
24. (original): The system of Claim 23, wherein,  
said server means for reconnecting said user with said data stream is a pointer for accessing data in said data store at discrete locations.
25. (currently amended): A system comprising:  
a server for transmitting user requested data in a data flow for reception by a plurality of users requesting said data flow at substantially the same time;  
said server having means for connecting said server to a telecommunications network for ~~the transmission of data~~ transmitting a plurality of data transmissions, each of the plurality of data transmissions comprising a different point of transmission within the data flow; and  
said server including means for responding to user requests for data, said user requests being received from said telecommunications network; ~~and for identifying the individual requesters as the source of respective user requests for data and arranging said individual requesters in respective groups for receiving said user requested data in a data stream~~;  
said server for defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective different point of transmission within the data flow, so as to cause each user in a respective group to receive the same data as all other users in the respective group;  
the server for identifying the individual requesters as the source of respective user requests;

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and wherein said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging each of said individual requesters ~~in each of said~~ into a respective ~~group groups for reception of said user requested data in said respective data stream, the~~ respective group corresponding to a point of transmission of said data flow determined by time of request or by number of requests; ~~for transmission of the same user requested data in said respective data stream to the respective users in respective groups,~~

and the server for distributing the user load on said server and shifting said user load toward a steady state load on the server by distributing said users among the respective groups ~~over the transmission of said data flow by time of data stream transmission or by place in said data flow transmission.~~

26. (original): The system of Claim 25, wherein,  
said groups are arranged by number of said individual requesters.
27. (currently amended): The system of Claim 25, wherein,  
said groups are arranged by the time of receipt of said requests.
28. (previously presented): The system of Claim 25, wherein said server is limited to a maximum number of said groups; and wherein said server arranges said groups in relation to said maximum number.
29. (original): The system of Claim 25, wherein said telecommunications medium is the Internet.
30. (original): The system of Claim 25, wherein said user's requests are received from a world wide web browser.
31. (currently amended): The system of Claim 25, wherein said server includes means for shifting said respective individual requesters between said groups to change the ~~time of reception~~

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~~of data transmission received by said user requested data relative to said data stream transmission.~~

32. (currently amended): The system of Claim 25, wherein,  
said user requested data is accessed from a data store communicatively coupled to the server; and

said server includes means for changing the location in the data store accessed for shifting the location of the user requested data relative to said data streamflow transmission.

33. (currently amended): A method comprising the steps of:

receiving, at a server having a data store, user requests for transmission of user requested data in a data flow for reception by a plurality of users across a telecommunications medium;

transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging said plurality of users into each of a respective group within the plurality of groups in at least one group of recipients of said user requested data in said data flow with each user of the plurality of users being arranged in a respective group of said at least one group, and wherein each respective group for receiving said user requested data in a respective data stream corresponding to a point of transmission of said data flow; and

~~sending said user requested data in a respective data transmission stream from the data store of the server to the telecommunications medium, wherein each said respective data stream being destined for reception by said respective group of recipients, and~~

realigning, at the server, a respective first user within the plurality of users from a first respective group corresponding within the plurality of groups, the first group corresponding to



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users receiving user requested data at a first location in the respective user requested data, stream to a second respective group, the second group corresponding to users receiving user requested data at a second location in the user requested data, so as to cause the first user to receive the same data as a second user previously assigned to the second group; stream,

the second location being selected by the server, independent of said user requests for data, to change the location in the user requested data stream from which from which the respective user is receiving the user requested data to any location in the user requested data stream other than the first location in the user requested data stream.

34. (previously presented): The method of claim 33, wherein said step of arranging includes the step of arranging said groups in relation to a maximum number of said groups said server can send said data.

35. (original): The method of Claim 33, including the step of sending said data through the Internet.

36. (original): The method of Claim 33, including the step of receiving said user's requests from a world wide web browser.

37. (currently amended): The method of Claim 33, wherein, said step of arranging includes the step of realigning a respective user with said data stream to change the relative position of ~~said respective user to in~~ the data stream of data being transmitted to said respective user in said data stream, responsive to a signal from said respective user.

38. (original): The method of Claim 33, wherein, said step of arranging, arranges said users into said groups arranged by the size of said group.

39. (original): The method of Claim 33, wherein, said step of arranging, arranges said users into said groups arranged by a time interval for assembling said group.

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40. (previously presented): The method of Claim 37, wherein, said data is transmitted with identifiable locations in said data stream, and the method further comprising the steps of:

identifying a respective identifiable location in said data stream corresponding to said user signal; and

moving said user to another of said groups receiving said data stream from a location in said data stream related to said respective identifiable location.

41. (currently amended): In a system for transmitting data in a data stream sent from a server to a plurality of users requesting access to said data stream at substantially the same time, a method comprising the steps of,

sending at least one data stream from a server to a plurality of users that requested data from the server;

transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

arranging, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, said plurality of users into each of a respective group within the plurality of groups, the plurality of groups comprising a first group and a second group, each of said groups for reception of a respective data transmission data stream transmitted from the server, ~~each respective data stream corresponding to reception of user requested data at a point of transmission of said data flow;~~ and

moving, independent of said user requests for data, one of the plurality of users from said first group to said second group for reception, by said one of the plurality of users, of user requested data at a point of said data flow relatively displaced in space or time from reception by said first group, so as to cause said one of the plurality of users to receive the same data as a second user previously assigned to the second group.

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~~42-46.~~ (canceled):

47. (currently amended): A computer program product for use in operating a computer, the computer program product including computer instructions comprising instructions for:  
 receiving, at a server, requests for data from users, said data being organized for transmission in a data flow from a data store;

transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

the server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, arranging said users in each of a respective group within the plurality of groups, wherein each of said groups corresponding to reception of a respective data transmission ~~user-requested data in a data stream at a point of said data flow;~~

distributing ~~the a~~ user load on the server and shifting the user load toward a steady state load on the server by distributing the plurality of users among the groups assigned by ~~over a transmission of the data flow~~ by time of data stream transmission or by place in the data flow transmission; and

responsive to said users' requests, sending said user requested data in at least one data stream from said data store to said groups with users assigned to a respective group within said groups ~~all receiving the same data separate respective portions of said data relatively displaced in space or time.~~

48. (currently amended): A system for transmitting data in a data stream to grouped recipients, comprising:

a server, for receiving users' requests for transmission of user requested data in a data flow for reception by said users;

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said server for transmitting a plurality of data transmissions, each of the plurality of data transmissions transmits the user requested data at one respective point of transmission location that is different than other data transmissions within the plurality of data transmissions;

said server for defining a plurality of groups, wherein each group in the plurality of groups is assigned to receive a respective data transmission within the plurality of data transmissions, the respective data transmission corresponding to a respective point of transmission location within the user requested data;

said server, independent of said user requests for data and while preserving the impression to individual users requesting data that each is being immediately served with requested data, for arranging said users in into each of a respective group within the plurality of groups at least one group of recipients of a respective data stream of the at least one data stream, with each user being arranged in a respective group of the plurality of groups at least one group, and wherein each user in each respective group receives an assigned respective data transmission and the same data as all other users in that respective group for receiving said user requested data in said respective data stream corresponding to a point of transmission of said data flow; and

said server, responsive to the arrangement of said users in the plurality of groups said at least one group, for transmitting said user requested data in said respective data stream to each said respective group, and wherein the server for realigning a respective user

from a first respective group corresponding to said respective user receiving user requested data being transmitted at a first location in the user requested data flow at a first point in time

to a second respective group corresponding to said respective user receiving transmission of said user requested data being transmitted at the first location in the user requested data, so as to cause the first user to receive the same data as a second user previously assigned to the second group flow at a second point in time,

the second point in time being selected by the server, independent of said user requests for data, to change the relative time the respective user is receiving the transmission of said user requested data being transmitted at the first location in the user requested data flow.